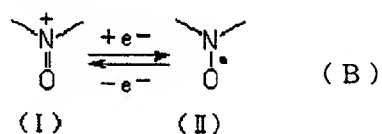
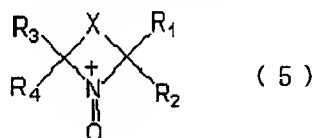


## CLAIMS

1. A power storage device comprising a nitroxyl polymer which has a nitroxyl cation partial structure represented by the following chemical formula (I) in oxidation state and has a nitroxyl radical partial structure represented by the following chemical formula (II) in reduction state, in a cathode; employing a reaction for transferring an electron between the two states represented by the following equation (B) as an electrode reaction of the cathode; and using a lithium or lithium alloy anode as an anode active material; wherein the cathode is in direct contact with the anode.



2. The power storage device according to claim 1, wherein a lithium-tin alloy or a lithium-silicon alloy is used as the anode active material.
3. The power storage device according to claim 1 or 2, using a cathode collector having a conductive auxiliary layer comprising carbon as a main component formed and integrated on an aluminum electrode as a cathode collector.
4. The power storage device according to claim 1 or 2, using a carbon paper as a cathode collector.
5. The power storage device according to any one of claims 1 to 4, wherein the nitroxyl polymer is a polymer compound having a cyclic nitroxyl structure represented by the following chemical formula (5) in oxidation state:



wherein each of R<sub>1</sub> to R<sub>4</sub> independently represents an alkyl group, and X represents a divalent group so that the chemical formula (5) forms a 5- to 7-membered ring, while X constitutes a part of a side chain or a main chain of the polymer.

- 5            6. The power storage device according to claim 5, wherein the nitroxyl polymer is a polymer compound having a side chain containing a residue which removes at least one hydrogen atom bonded to an element forming at least one cyclic nitroxyl structure selected from the group consisting of a 2,2,6,6-tetramethylpiperidinoxyl cation represented by  
10 chemical formula (6), a 2,2,5,5-tetramethylpyrrolidinoxyl cation represented by chemical formula (7) and a 2,2,5,5-tetramethylpyrrolinoxyl cation represented by chemical formula (8).

